



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/681,412	03/30/2001	Eleanor S. Wilson	85SF-00110 (17410-11)	3204
23465	7590	03/31/2009		
JOHN S. BEULICK C/O ARMSTRONG TEASDALE, LLP ONE METROPOLITAN SQUARE SUITE 2600 ST LOUIS, MO 63102-2740			EXAMINER LOFTUS, ANN E	
			ART UNIT 3692	PAPER NUMBER
			NOTIFICATION DATE 03/31/2009	DELIVERY MODE ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

USpatents@armstrongteasdale.com

Office Action Summary	Application No.	Applicant(s)	
	09/681,412	WILSON ET AL.	
	Examiner	Art Unit	
	ANN LOFTUS	3692	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 December 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 and 45-53 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20, and 45-53 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Status of the Claims

1. This action is in response to a request for continues examination filed on 12/10/08 concerning claims filed on 10/31/08. Claims 1-20, and 45-53 are pending. Claims 21-44 and 54-63 are cancelled.
2. The application was filed on 3/30/2001 without provisional. Related cases include PCT US02 02236 which is a continuation of this application.

Continued Examination Under 37 CFR 1.114

3. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission has been entered.

Response to Arguments

4. Applicant's arguments have been considered but are moot in view of the new ground(s) of rejection. The applicant argues that neither Tengel nor Maestle teach the newly amended feature of calculating an equity valuation. The feature is addressed below with new grounds.

Claim Objections

5. Claims 1, 11 and 45 are objected to on the basis of a grammatical error: "wherein the energy asset including." Perhaps "including" should read "includes".

Claim Rejections - 35 USC § 101

6. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

7. Claims 1-10 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

Claim 1 recites a method. The Bilski decision establishes the following test for claimed processes under 35 USC 101. The process passes if :

"(1) it is tied to a particular machine or apparatus, or (2) it transforms a particular article into a different state or thing. See Benson, 409 U.S. at 70 ('Transformation and reduction of an article 'to a different state or thing' is the clue to the patentability of a process claim that does not include particular machines. '); Diehr, 450 U.S. at 192 (holding that use of mathematical formula in process 'transforming or reducing an article to a different state or thing' constitutes patent-eligible subject matter); see also Flook, 437 U.S. at 589 n.9 ('An argument can be made [that the Supreme] Court has only recognized a process as within the statutory definition when it either was tied to a particular apparatus or operated to change materials to a 'different state or thing' '); Cochrane v. Deener, 94 U.S. 780, 788 (1876) ('A process is...an act, or a series of acts, performed upon the subject-matter to be transformed and reduced to a different state or thing.').⁷ A claimed process involving a fundamental principle that uses a particular machine or apparatus would not pre-empt uses of the principle that do not also use the

Art Unit: 3692

specified machine or apparatus in the manner claimed. And a claimed process that transforms a particular article to a specified different state or thing by applying a fundamental principle would not pre-empt the use of the principle to transform any other article, to transform the same article but in a manner not covered by the claim, or to do anything other than transform the specified article.” (*In re Bilski*, 88 USPQ2d 1385, 1391 (Fed. Cir. 2008))

Bilski further says that the particular machine or apparatus or transformation must be central to the purpose of the claimed process, and not mere extra-solution activity such as gathering data or recording results. As far as the transformation, Bilski also says on page 28 “Purported transformations of manipulations simply of public or private legal obligations or relationships, business risks, or other such abstractions cannot meet the test because they are not physical objects or substances, and they are not representative of physical objects or substances.” The transformation of data unrelated to the physical world is thus not sufficient.

Claim 1 recites a computer in the preamble and for gathering data. As written, the scope of the claim includes gathering data by computer, then allowing a person to do the analysis, recommendation and equity valuation. The heart of the invention is judged to be the analysis, recommendation and perhaps the equity valuation, but data gathering is judged to be extra-solution activity as this is not an invention about how to gather data. Thus the central steps are not directly tied to a particular machine. Claims 2-10 do not remedy the problem.

Claims 1- 10 are not tied to a particular machine or apparatus nor do they transform a particular article into a different state or thing; therefore, they are non-statutory under § 101.

Claim Rejections - 35 USC § 112

8. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

9. Claims 11-20 and 45-53 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with 35 USC 112 first paragraph.

Claims 2, 12, and 46 recite determine whether the selected financing type is the recommended financing type. The written description is required to show that the method and apparatus claimed had this feature at the time of the invention. The examiner does not find support for this feature in the specification.

As to claim 11, the claim recites a computer followed by functional limitations. A computer is defined as a computing device. Any device that gathers input information, analyzes it, and makes a recommendation and a calculation could be considered a computing device. A claim element that is a purely functional recitation with no limitation of structure is properly rejected under 35 USC 112, first paragraph (unless it properly invokes 35 USC 112 sixth paragraph), as In Ex Parte Miyazaki Appeal 2007-3300 decided 11/19/2008, especially pages 21- 27. In Miyazaki, the Board finds that the concerns of the Supreme Court in Halliburton Oil Well Cementing Co v. Walker, 329 US

Art Unit: 3692

1(1946) apply when the claim is not limited by the application of 35 USC 112 sixth or the additional recitation of structure. Unlimited purely functional claiming may reasonably be construed to encompass any and all structures or acts for performing the recited function, including those which are not what the applicant invented. When the limitation encompasses any and all structures or acts for performing a recited function, the disclosure fails to provide a scope of enablement commensurate with the scope of the claim.

In re Hyatt, 708 F.2d 712, 714-715, 218 USPQ 195, 197 (Fed. Cir. 1983), the Federal Circuit Court stated that a “single means claim which covered every conceivable means for achieving the stated purpose was held nonenabling for the scope of the claim because the specification disclosed at most only those means known to the inventor” (MPEP 2164.08(a)). The specification of the instant application does not provide sufficient disclosure to enable one to make and use all of the possible means (or equivalent types of structure) that can be utilized to accomplish the recited functionality; therefore, claim 11 is rejected as a single means claim. Claims 12-20 fail to remedy the problem and are also rejected. Claims 17 and 18 come close by mentioning a computer generated screen, yet the limitation is expressed in functional language rather than as describing structure. The structure of the computer is not positively recited as including a display for a computer generated screen. The claim should positively recite the structure of the device claimed. The computer generated screen itself is interpreted to be an arrangement of pixels rather than a physical device.

Adding further physical structure to claim 11 is likely to address this rejection by limiting the structures claimed to those known to the inventors.

Claims 45 -53 are rejected under 35 USC 112 first paragraph because they recite means for various purposes, where the means are not adequately described in the specification. 35 USC 112 sixth paragraph is invoked by the language "means for" or "step for." The means are recited as components to an apparatus, therefore the specification must describe the components which perform the means, and clearly link the component description to the means claimed, such that a person of ordinary skill would be apprised of the scope of the claim by finding the description in the specification. If the component consists of a computing device, then an adequate description must also provide the algorithm by which the component accomplishes the function. While general purpose computers are disclosed, no algorithm is disclosed that would render these computers capable of performing the functions claimed.

The following four claim elements are problematic, in these claims and independent claims where they are further limited.

Claim 45: Means for analyzing the information inputted into the computer by the customer;

Claim 45: means for recommending to the customer based on the analyzed information a type of financing ...;

Claim 45: means for calculating an equity valuation ...;

Claim 46: means for evaluating a financing type...;

To address this rejection of claims 45-53, Applicant is required to:

(a) Amend the claims so that the claim limitations will no longer be a means (or step) plus function limitation under 35 U.S.C. 112, sixth paragraph; or

(b) Amend the written description of the specification such that it expressly recites what structure, material, or acts perform the claimed functions without introducing any new matter (35 U.S.C. 132(a)).

If applicant is of the opinion that the written description of the specification already implicitly or inherently discloses the corresponding structure, material, or acts so that one of ordinary skill in the art would recognize what structure, material, or acts perform the claimed functions, applicant is required to clarify the record by either:

(a) Amending the written description of the specification such that it expressly recites the corresponding structure, material, or acts for performing the claimed functions and clearly links or associates the structure, material, or acts to the claimed function, without introducing any new matter (35 U.S.C. 132(a)); or

(b) Stating on the record what the corresponding structure, material, or acts, which are implicitly or inherently set forth in the written description of the specification, perform the claimed functions. For more information, see 37 CFR 1.75(d) and MPEP §§ 608.01(o) and 2181.

10. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Art Unit: 3692

11. Claims 1-20 and 45-53 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

MPEP 2173.05(b) explains that a term of degree is unacceptable when the art provides no standard to inform a person of ordinary skill of the scope of the claim. Claims 1, 11, and 45 recite an energy-*related* asset. The term is found vague and indefinite. A person of ordinary skill in the art, considering an asset, would not have a standard by which to decide whether the asset was energy-related or not. The scope is unclear. The claims further recite the calculated equity valuation *relates* to the energy-related asset. Common sense would preclude some tenuous relationships, but where would one draw the line? Without further detail as the relationship between the valuation and the asset, the metes and bounds are unclear.

Claims 1, 11 and 45 recite financing by a financing project. This term is vague and indefinite in that a person of ordinary skill would not be able to identify whether a financing option was a financing project or not.

Claims 1, 11, and 45 recite a high yield debt. How high is high? The metes and bounds of the term are unclear.

Claims 2, 12, and 46 recite a selected financing type. However, there is no antecedent where the selection takes place. What selection do the claims refer to?

Claim 11 recites a computer but the structure of that computer is described in terms of method steps. It is unclear which statutory class is intended – a method or an apparatus? Claims 12-20 do not remedy the problem.

Claims 45-53 appear to invoke 35 USC 112 sixth paragraph. This claim is not clearly linked to structure or acts in the specification, including an algorithm for performing the function claimed. A computer implemented means plus function limitation that invokes 35 USC 112 sixth paragraph is required to have more than just a general purpose computer as corresponding structure. The specification must also include the algorithm that transforms the computer into a special purpose computer, even if one of ordinary skill in the art could write it. The requirement that a particular structure be clearly linked with the claimed function in order to qualify as corresponding structure is the quid pro quo for the convenience of using 112 sixth, and is supported by 35 USC 112 second. See *Aristocrat*, 521 F.3d at 1334-8, 86 USPQ2d at 1240-1243, and also MPEP 2181. The four claim elements listed above are not clearly tied to algorithms in the specification, thus the metes and bounds of the scope are unclear.

Claim 49 recites an escalator. The plain meaning of escalator is a form of motorized staircase. Perhaps the applicant intended a price escalator? The meaning is unclear.

Claim Rejections - 35 USC § 103

12. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Art Unit: 3692

13. Claims 1-20 and 45-53 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent 7177834 filed 9/29/2000 by Maestle, in view of US 2002 0040356 filed 9/26/2001 (provisional 9/26/2000) by Gluck, in view of US Patent 7426488 filed 11/14/2001 (provisional 11/14/2000) by Gompers et al.

As to claims 1, 11, and 45,

Maestle in col 53 line 45 to col 54 line 35 teaches prompting a customer to provide information related to at least one requirement for financing and prompting the customer to input into the computer responses to a plurality of questions regarding the at least one requirement for financing the energy related asset.

Maestle teaches in Fig 9 and col 89 lines 12-46 analyzing the information inputted by the customer.

Maestle teaches in col 45 and 46 prompting the customer to input into the computer information describing the asset being financed, but does not teach prompting the customer to input into the computer information describing the energy related asset being financed, wherein the energy-related asset including at least one of a power generating facility, a refinery, a mine, and a pipeline. Gluck teaches a power generating facility in paragraph 18 page 2. It would have been obvious to a person of ordinary skill in the art at the time of the invention to modify Maestle to add prompting the customer to input into the computer information describing the energy related asset being financed, wherein the energy-related asset including at least one of a power generating facility, a refinery, a mine, and a pipeline in order to broaden the market for the financing tool to include more industries.

Maestle teaches types of financing as parts of the financial model throughout. Maestle does not teach recommending to the customer. Gluck paragraph 26 page 3 teaches recommending to the customer based on the analyzed information a type of financing for financing the energy related asset. The types of financing listed are old and well-known, and constitute non-functional descriptive matter to the claimed invention. It is nonfunctional because it would not change the definitive steps of the method nor the structure of the apparatus to alter the type of financing presented in the recommendation. Thus the types of financing recommended will not serve to patentably distinguish the invention from the reference. It would have been obvious to a person of ordinary skill in the art at the time of the invention to modify Maestle to add recommending to the customer based on the analyzed information a type of financing for financing the energy related asset in order to make optimal financial arrangements for each project.

Maestle does not teach calculating an equity valuation using information inputted by the customer, wherein the calculated equity valuation relates to the energy-related asset. Gompers teaches this in col 1 line 40 to col 2 line 5. It would have been obvious to a person of ordinary skill in the art to modify Maestle to add calculating an equity valuation like so in order to be able to determine the effects of equity changes on the financing model.

As to claims 2, 12, and 46, Maestle teaches evaluating a financing type selected by the customer in col 53 line 16 to 45. Maestle teaching comparing selections with expectations in col 25 lines 45-68. Thus in context where selecting a financing type is

Art Unit: 3692

known and a financing recommendation is known as above, it would have been obvious to a person of ordinary skill in the art at the time of the invention to modify Maestle to add determining whether the selected financing type is the recommended type in order to track whether the customers are following the recommendations.

As to claims 3, 13, and 47, Maestle discloses, evaluating by the computer a financing type selected by the customer including a project common equity (col. 55, lines 8-43); Gluck teaches the equity evaluation tool as above. Thus the Maestle Gluck Gompers combination teaches accessing an equity valuation tool when the customer inputs project common equity as the financing type (Maestle col. 56, lines 5-67); calculating and equity valuation using the equity valuation tool and information inputted by the customer, including at least one of size of plant in Megawatts, a heat rate, a percentage of revenues under contract, a number of years remaining under contract, and a remaining term of the debt associated with the plant. (Maestle col. 57, line 1-col. 58, line 53).

As to claims 4, 14, and 48, Maestle discloses prompting the customer to provide information describing the energy-related asset including an energy output of the asset (col. 91, line 23-col. 92, line 65). Maestle teaches prompting about capacity (col 46 starting line 35), which in the context of power generation, would be energy output.

As to claim 49, Maestle does not teach the energy related asset comprises a power generating facility, but Gluck does as above. Maestle teaches the information provided by the customer describing the energy related asset includes capacity (col 46 starting line 35), contract data (col 80 line 1), loan/debt data (starting col 53 line 45),

Art Unit: 3692

pricing of product (starting col 73 line 55), and variable costs (starting col 64 line 8) which in the context of a power generating facility suggests plant size, a heat rate, a percentage of revenues under contract, a remaining term of the existing debt, an outstanding principal, interest rate, electricity prices, and an annual rate of increase, and projections of prices and projected fuel costs including an escalator.

As to claims 5 and 15, Maestle discloses, wherein the energy-related asset is a power generation plant, the information provided by the customer describing the energy-related asset includes power plant information, current financing information, projected electricity prices (col. 93, line 40-col. 97, line 50).

As to claims 6, 16, and 50, Maestle discloses, wherein default values are available for at least one of projected electricity prices and projected fuel costs, when specific values are not provided (col. 103, line 1-col. 109, line 65).

As to claims 7 and 17, Maestle teaches a graphical user interface in col 3 near line 50 displaying a computer generated screen. Maestle teaches describing a selected financing type in col 114.

As to claims 8, 18 and 51, Maestle teaches in conjunction with the software a plurality of background questions relating to the financing requirement as above. Maestle teaches a graphical user interface in col 3 near line 50. It would have been obvious to a person of ordinary skill in the art at the time of the invention to modify Maestle to integrate the questions into the GUI, to result in displaying a computer generated screen listing a plurality of background questions relating to the financing requirement; and displaying a computer generated screen listing a plurality of financing

Art Unit: 3692

specific questions, in order to keep the input guidance close to the input mechanism, and reduce user frustration.

As to claims 9, 19 and 52, Maestle discloses, wherein the background questions relating to the financing requirement comprise at least one of the country where financing is required, which energy related business is the financing for, is the financing required for an operating asset, are U.S. taxes currently being paid by the customer, is the customer interested in either of off-balance sheet or non-recourse financing, and is the customer interested in structured debt such as high yield debt or subordinated debt (col. 14, line 6-col. 26, line 61).

As to claims 10, 20 and 53, Maestle discloses, wherein the financing specific questions comprise at least one of amount of financing, selling or optimizing equity position, willing to share control, upside potential and residuals of the asset, willing to subordinate equity distribution to a preferred equity investor, willing to be contacted regarding the financing, early stage pre-lpo company or company in early stage of corporate cycle and interested in financing senior to common equity but junior to lenders and regarding the financing, early stage pre-lpo company or company in early stage of corporate cycle and interested in financing senior to common equity but junior to lenders and trade creditors (col. 110, lines 43-67).

Conclusion

14. While portions of interest have been indicated, all references should be considered for the entirety of their teachings.

15. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ann Loftus whose telephone number is 571-272-7342. The examiner can normally be reached on M-F 8-4.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kambiz Abdi can be reached on 571-272-6702. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

AL

/James P Trammell/
Supervisory Patent Examiner, Art Unit 3694

Application/Control Number: 09/681,412
Art Unit: 3692

Page 17